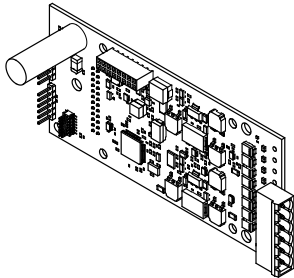


EVOLVE-SLC-250 Single SLC Interface Card Installation Sheet



Description

The EVOLVE-SLC-250 Single SLC Interface Card provides one device signaling line circuit (SLC) on the control panel. Included hardware consists of a PCB connector, three standoffs, and three screws.

The card expands the control panel's device capability with an additional 250 device addresses (125 detectors and 125 module addresses). Refer to the EVOLVE-CU Help for programming information and the *EVOLVE Technical Reference Manual* (P/N 3102926) for expansion slot information.

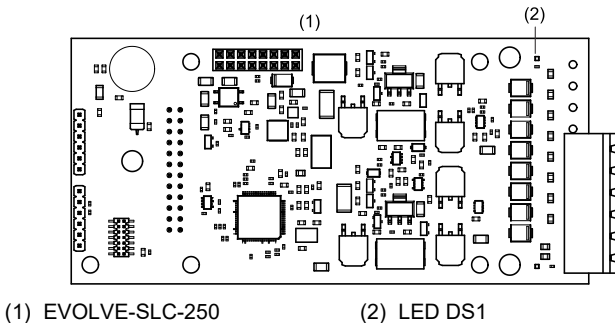
EVOLVE-SLC-250 LED

There is one LED on the card that indicate loop communication status. See Table 1 and Figure 1 for location and function of the LED.

Table 1: LED function

LED	Function
DS1	Loop 1 device communication: Flashes to indicate normal device communications.

Figure 1: EVOLVE-SLC-250 LEDs



(1) EVOLVE-SLC-250

(2) LED DS1

Installation

Install and wire this device in accordance with applicable national and local codes, ordinances, and regulations.

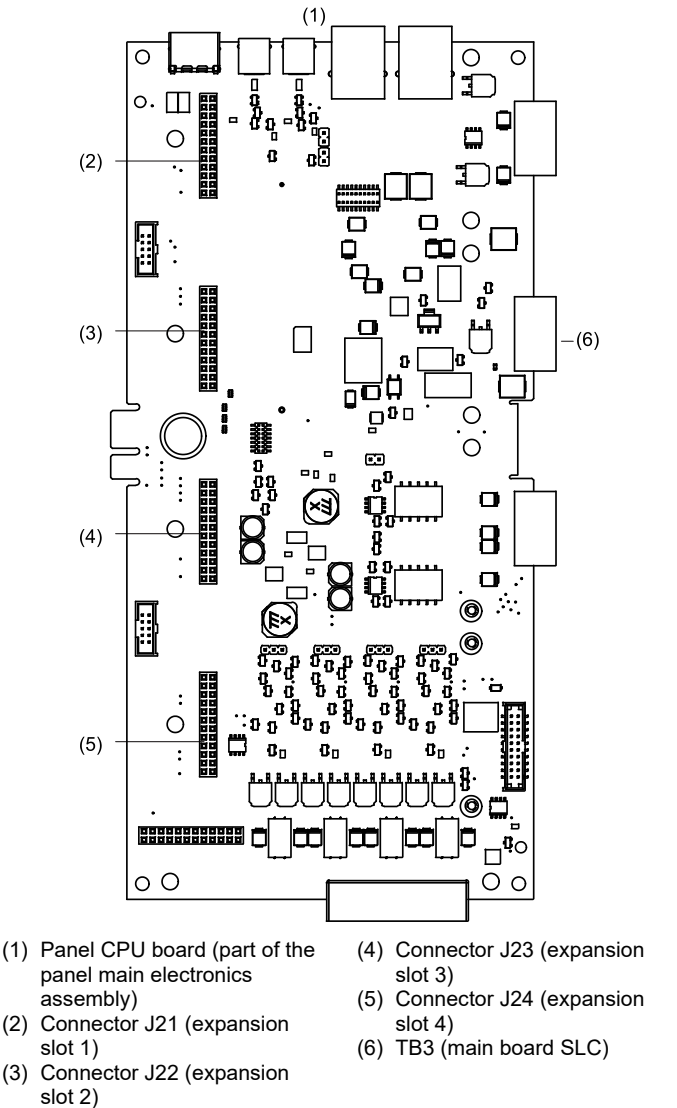
WARNING: Electrocution hazard. To avoid personal injury or death from electrocution, remove all sources of power and allow stored energy to discharge before installing or removing equipment.

Caution: Circuit boards are sensitive to electrostatic discharge (ESD). To avoid damage, follow ESD handling procedures.

To install the EVOLVE-SLC-250:

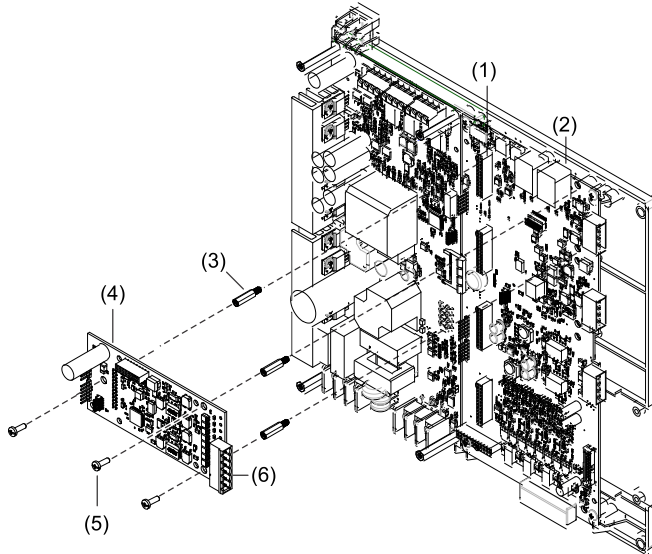
1. Power down the panel by first disconnecting the batteries, and then disconnecting the main AC power.
2. Install the standoffs into the panel CPU board as shown in Figure 3.
3. Install the EVOLVE-SLC-250 in expansion slot 1, slot 2, slot 3, or slot 4 (Figure 2). Make sure you properly align the connector pins and plastic mounting standoffs (Figure 3).
4. Secure the EVOLVE-SLC-250 using the hardware provided. See Figure 3.
5. Connect the field wiring. See "Wiring" on page 2.
For ease of wiring, prewire the PCB connector, and then plug it into TB1 (item 6, Figure 3) on the EVOLVE-SLC-250 card.
6. Power up the panel by first connecting the main AC power, and then connecting the batteries.

Figure 2: Panel CPU board expansion slot identification



- | | |
|---|--------------------------------------|
| (1) Panel CPU board (part of the panel main electronics assembly) | (4) Connector J23 (expansion slot 3) |
| (2) Connector J21 (expansion slot 1) | (5) Connector J24 (expansion slot 4) |
| (3) Connector J22 (expansion slot 2) | (6) TB3 (main board SLC) |

Figure 3: EVOLVE-SLC-250 installation (expansion slot 1 shown)



- | | |
|---|-------------------------------------|
| (1) Connector J21 (expansion slot 1) | (3) #6-32 X 0.688 in. standoff (3X) |
| (2) Panel CPU board (part of the panel main electronics assembly) | (4) EVOLVE-SLC-250 |
| | (5) #6 x 7/16 in. screw (3X) |
| | (6) Terminal board TB1 |

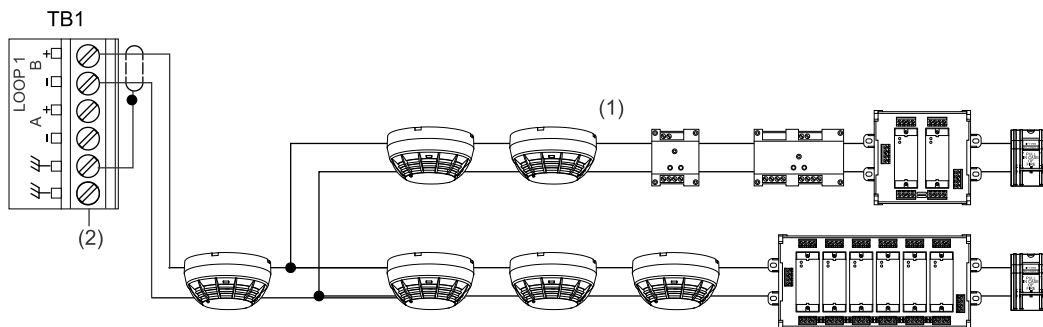
Wiring

The card provides either Class B/DCLB, Class A/DCLA, or Class X/DCLC wiring options. Wire the device as shown in Figure 4 or Figure 5. Be sure to observe the polarity of the wires.

Notes

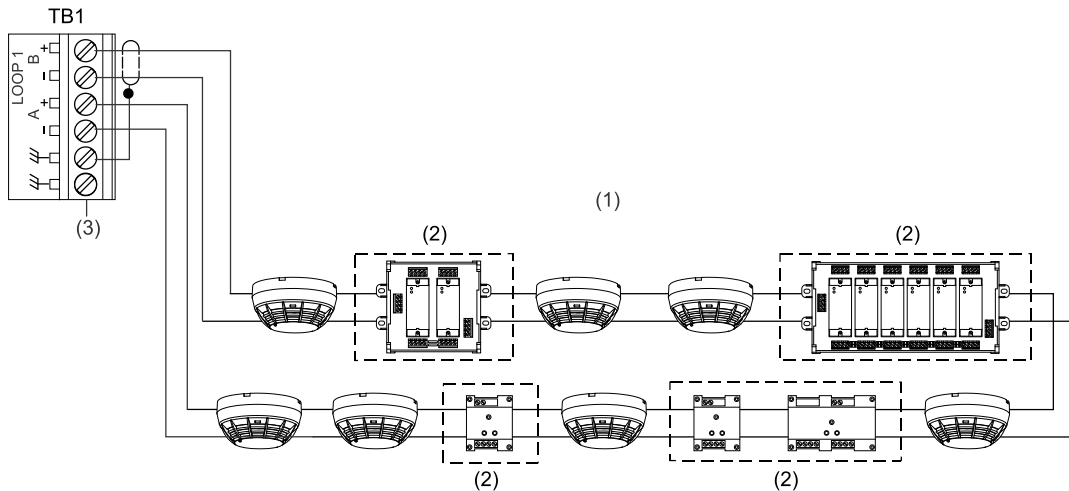
- Wiring is supervised and power-limited.
- SLC pathways that provide signaling outputs to more than one fire notification zone must prevent a single break, single ground, or wire-to-wire fault from adversely affecting more than one zone.
Exception: SLC pathways installed for survivability from attack by fire in accordance NFPA 72.
- If shielding is used it must be continuous, free from earth ground, terminated at the shield terminal only, and taped throughout the entire circuit.
- If notification appliances are used on the data line for more than one zone, each zone must have isolation so that a break, ground, or wire-to-wire fault does not affect more than one zone.

Figure 4: Class B/DCLB wiring



- (1) Class B/DCLB wiring.
(2) PCB connector

Figure 5: Class A/DCLA [1] and Class X/DCLC [2] wiring



Legend

- (1) Class A/DCLA and Class X/DCLC wiring
- (2) For Class X/DCLC wiring, un-isolated devices must be mounted in a cabinet with isolators on the incoming and outgoing wiring.
- (3) PCB connector

Notes

[1] For Class A/DCLA wiring, isolator modules and isolator detector bases are required to prevent wire-to-wire shorts on the signaling line circuit wiring from adversely affecting other segments of the loop. Do not install more than 50 addressable devices between isolators, per NFPA 72.

[2] For Class X/DCLC wiring, isolator modules and isolator detector bases are required to prevent wire-to-wire shorts on the signaling line circuit wiring from adversely affecting any devices of the loop.

Specifications

Device addresses	250 per loop (125 detectors and 125 module addresses)
Wiring	Class B/DCLB, Class A/DCLA, or Class X/DCLC
Operating voltage	24 VDC
Operating current (fully loaded loop)	Standby: 65 mA Alarm: 86 mA Note: These ratings do not include the use of two-wire smoke modules.
Signature SLC voltage	21.0 V Max.
Wire size	12 to 18 AWG (1.0 to 4.0 mm ²)
Circuit current	0.5 A max.
Max. total loop resistance	100 Ω
Max. total loop capacitance	0.5 μ F
Isolators	64 isolators maximum per loop (total both isolator bases and modules)
Ground fault impedance	0 to 5 k Ω
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing at 90°F (32°C)

Regulatory information

FCC compliance	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Environmental class	UL/ULC: Indoor dry

Contact information

For contact information, see www.kidde-esfire.com.